DOCUMENT RESUME

ED 290 347 FL 017 134

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TITLE Chapter I English as a Second Language Program, 1985-1986. OEA Evaluation Section Report.
INSTITUTION New York City Board of Education, Brooklyn. Office of Educational Assessment.
PUB DATE Oct 87
NOTE 38p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Elementary Education; *English (Second Language); *Intensive Language Courses; Junior High Schools; Limited English Speaking; Private Schools; Program Evaluation; *Second Language Programs; Skill Development; *Urban Schools
IDENTIFIERS *New York (New York)

ABSTRACT

A program in English as a second language for students in New York nonpublic schools is evaluated. The program provided intensive English language supplemental instruction to enhance listening, speaking, reading, writing, cognitive, and conceptual skills in limited-English-speaking students in kindergarten through grade 8. Evaluation was accomplished through language and basic skills testing. The results suggest that the program was generally highly successful as measured by test score gains. All of the gains were above the program's criteria of success. Recommendations call for improved techniques for measuring student progress and increased student access to read-along tapes. The report contains background information, a description of the program and its organization, presentation of student outcome data, and conclusions and recommendations. (MSE)

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ED290347

O.E.A. EVALUATION SECTION REPORT

Robert Tobias, Administrator
John Schoener, Senior Manager

October, 1987

CHAPTER I
ENGLISH AS A SECOND LANGUAGE PROGRAM
1985-1986

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BUREAU OF NONPUBLIC SCHOOL REIMBURSABLE SERVICES
CHAPTER I ENGLISH AS A SECOND LANGUAGE

Year of Operation: 1985-86

Number of Participants: 4,305

Director: Margaret O. Weiss

Program Coordinator: Maria Mastrandrea

EVALUATION SUMMARY
1985-86

BACKGROUND

In 1985-86, the Chapter I English as a Second Language (E.S.L.) Program provided intensive English language supplemental instruction to students with limited English proficiency. The program's main goals were to enhance development of skills in listening, speaking, reading, and writing; and to develop students' cognitive and conceptual skills.

The program served 4,305 students in kindergarten through grade eight from 111 nonpublic schools. Program staff included one coordinator, two field supervisors, and 80 teachers. Funding for this school year's program was $3.5 million. To achieve the program's objectives, the curriculum required the teachers to use a variety of materials and class activities. Students received E.S.L. instruction two to five times a week in sessions lasting from 30 to 60 minutes. Some of the students participated in the Read-Along Program; this supplement to the program provided students with tape recorders, storybooks, and read-along tapes to be used at home.

EVALUATION CRITERIA

To assess the impact of the E.S.L. Program on student performance, the Office of Educational Assessment (O.E.A.) undertook an analysis of pre- and posttest data. The O.E.A. used the following instruments: the Language subtest of the Test of Basic Experiences (TOBE) was given to kindergartners and first graders; the Total Auditory subtest of the Stanford Achievement Test (S.A.T.) was given to students in grades two through eight; and the Oral Interview Test (OIT) was administered to students in all grades. Program criteria included a gain of at least five N.C.E.s on the TOBE and on second-grade results on the S.A.T; statistically significant gains on the S.A.T. for grades three through eight; and statistically significant gains by all grade levels on the OIT. In addition to these criteria mandated by the State Education Department, the educational significance of overall mean gains was also calculated to assist program staff in determining the emphasis for staff development.

FINDINGS

Test results indicated that the E.S.L. Program was very successful as measured by gains in scores on the three tests. For each instrument and in nearly every grade, students made statistically significant and educationally meaningful gains. Total mean score gains on the TOBE and the S.A.T. Total Auditory subtest for kindergarten through grade two were 13 N.C.E.s. For grades three through eight on the S.A.T., the total raw-score mean gain was 9.0 N.C.E.s. The total mean gain for kindergarten

through grade eight on the OIT was 6.6 raw-score units. All of these gains were above the program's criteria of success. Students using the Read-Along tapes at home made statistically significantly higher gain scores than did a comparable group of students not using the tapes.

RECOMMENDATIONS

Based on the findings and other information presented in this report, the following recommendations are made to maintain and enhance the program's benefits to students:

- Efforts should be made to improve techniques for measuring student progress; the use of standardized and normed instruments, which measure students' growth in all grades, should be considered.

- Because the Read-Along Program contributes to improved achievement, more students should be given access to the audio tapes.

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I. INTRODUCTION

PROGRAM PURPOSE AND FEATURES

Supplementing general classroom education, the Chapter I English as a Second Language (E.S.L.) Program provides intensive English language instruction to limited English proficient (LEP) students in nonpublic schools. Program objectives include helping LEP students gain the essential listening, speaking, reading, and writing skills essential to improving their performance in school. The program is also designed to enhance participants' cognitive and conceptual abilities. The E.S.L. instructors use diverse cultural and linguistic resources to facilitate student interaction and encourage students' use of oral and written English in everyday situations. The program uses a diagnostic-prescriptive approach to determine students' individual areas of need and to tailor instruction to individual learning styles, as well as to students' varied levels of linguistic ability. Some students participate in the program for a maximum of three years, and many also participate in the Chapter I Corrective Mathematics and/or Clinical and Guidance Programs.*

ELIGIBILITY

The nonpublic school E.S.L. Program is designed to serve students in kindergarten through eighth grade in New York City nonpublic schools. Pupils are eligible if they live in Chapter I

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*See Appendix for a brief description of all the Chapter I nonpublic school instructional programs.

public school attendance areas with large concentrations of low-income populations and are determined to be limited English proficient based on their rating on the New York City Scale of Pupil's Ability to Speak English. These students, for the most part, are unable to participate due to the extent of their limited English proficiency. Placement priority is given to students showing the greatest need for remedial instruction.

STUDENTS SERVED

Table 1 shows the distribution of kindergarten through eighth grade E.S.L. students by grade level. Of the 4,305 students served, 73 percent (3,153) were in grades kindergarten through two. The remaining 27 percent were in grades three through eight, with the percentages decreasing as grade level increased. Of the total population, seven percent were holdovers from the previous year. Thirty-five percent of the students also participated in the Chapter I Clinical and Guidance Program during 1985-86.

Student participation by grade and years in the E.S.L. Program is shown in Table 2. In 1985-86, 60 percent of the students (2,565) participated for the first time; 27 percent were in their second year; and 13 percent had been in the program for three or more years.

The E.S.L. students had a variety of primary language backgrounds (Table 3). Spanish-speaking students (2,891) made up the largest group (67 percent). Most were in kindergarten

TABLE 1

Student Participation, by Grade, in the E.S.L. Program, 1985-86

Grade	N	Percent
K	947	22%
1	1,224	28
2	982	23
3	449	10
4	246	6
5	153	4
6	127	3
7	124	3
8	53	1
TOTAL	4,305	100

- Nearly three-quarters of the participating students came from grades kindergarten through two.
- The smallest number of E.S.L. students were in grade eight.

TABLE 2

Student Participation, by Grade and Years,
in the E.S.L. Program, 1985-86

Grade	N	Years in Program		
		1	2	3 or more
K	947	932	14	1
1	1,224	777	443	4
2	982	308	436	238
3	449	175	108	166
4	246	113	74	59
5	153	91	35	27
6	127	74	31	22
7	124	75	29	20
8	53	20	15	18
TOTAL	4,305	2,565	1,185	555

- The largest number of first-year students were kindergartners.
- Grades one and two had the largest number of second-year students.
- Grade two had the largest number of students in the program for three or more years.

through grade three. Other language groups represented were French or Creole (nine percent), Chinese (six percent), Greek (three percent), Italian (two percent), Russian (one percent), Iranian (less than one percent), and other languages (12 percent).

PROGRAM OBJECTIVES

Although the program helps LEP students retain their native language and culture, its main goal is to increase their learning potential and improve their academic performance in their regular classes. Therefore, the program emphasizes the study of the English language and contemporary North American culture while respecting the native cultures from which the students come.

The E.S.L. Program's immediate objective was that participating students make achievement gains on the Test of Basic Experiences (TOBE), Stanford Achievement Test (S.A.T.), and the Oral Interview Test (OIT). To evaluate student progress, program staff administered standardized and program-developed tests during the fall and spring. And, for the first time, staff assessed the degree of performance gain due to the addition of the Read-Along Program, an at-home audio tape and storybook supplement to the E.S.L. Program.

PROGRAM EVALUATION

To assess the impact of the program on student achievement, the evaluation measured the differences between pretest and

TABLE 3

Language Background, by Grade, for Students in the E.S.L. Program, 1985-86

	Language Background[a]									
Grade	1	2	3	4	5	6	7	8	9	Total
K	331	321	79	67	14	43	--	2	89	946
1	412	442	103	72	22	39	1	17	116	1,224
2	331	350	88	56	21	23	--	9	101	979
3	145	177	42	20	6	8	--	5	45	448
4	74	76	15	12	2	5	1	3	57	245
5	30	49	15	10	--	3	--	6	40	153
6	23	43	24	12	3	1	--	3	18	127
7	21	45	16	9	--	3	1	5	24	124
8	7	14	11	1	--	--	--	3	17	53
TOTAL	1,374	1,517	393	259	68	125	3	53	507	4,299[b]

[a]1 = Spanish (Puerto Rican)
2 = Spanish (Other)
3 = French/Creole
4 = Chinese
5 = Italian
6 = Greek
7 = Iranian
8 = Russian
9 = Other.

[b]The overall total is 4,305; six students had incomplete records.

- More than two-thirds of the students spoke Spanish as their native language.
- French/Creole and Chinese were the second- and third-largest language groupings.

posttest scores to determine performance gains of students by grade. Chapter I teachers collected data on each participating E.S.L. student. These data included pretest and posttest scores, grade level, contact time, years in the program, language background, and participation in the Clinical and Guidance Program.

The performance of E.S.L. students was measured, according to grade, with the following tests:

Grade	Test Name	Subtest Administered
K-1	Test of Basic Experiences	Language
2-8	Stanford Achievement Test	Total Auditory (Primary Level I)
K-8	Oral Interview Test	Total Score

These pretest and posttest analyses do not include students for whom test data were incomplete, or data on students who were in attendance for less than five months. In addition, test results on a sample of students were analyzed to determine whether students receiving at-home instruction via audio tapes (Read-Along Program), in addition to the general E.S.L. curriculum, performed differently than those not participating in the Read-Along Program. An analysis of covariance was used to determine any significant difference between participants and nonparticipants.

Pretest and posttest raw scores on the TOBE (given in kindergarten and grade one) and on the S.A.T. (given in grade two) were converted into normal curve equivalent (N.C.E.)

scores.* According to the State Education Department, improvement is operationally defined as an increase of five N.C.E.s in students' scores. This requirement was based on the assumption that, without special instruction, students would score at the same N.C.E. level on posttests as they did on pretests. In addition, correlated t-tests were computed to determine the statistical significance of the N.C.E. gains.

Because students in grades three through eight were given the second-grade level of the S.A.T., the use of norms was precluded, and raw scores for students in these grades could not be converted into N.C.E. scores. Similarly, the OIT is a program-developed, non-normed test. Accordingly, gains on these two tests were calculated on raw scores rather than on N.C.E.s, and correlated t-tests were computed to determine statistical significance.

The effect size** (E.S.) was calculated on all test outcomes to determine whether or not the performance gains were

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*N.C.E. scores are similar to percentile ranks but, unlike percentile ranks, are based on an equal-interval scale. The N.C.E. scores are based on a scale ranging from one to 99, with a mean of 50 and a standard deviation of approximately 21. Because N.C.E. scores are equally spaced apart, arithmetic and statistical calculations such as averages are meaningful; in addition, comparisons of N.C.E. scores may be made across different achievement tests and grade levels.

**The E.S., developed by Jacob Cohen, is the ratio of the mean gains to the standard deviation of the gain. This ratio provides an index of improvement in standard deviation units irrespective of the size of the sample. According to Cohen, .2 is a small E.S., .5 is a moderate E.S., and .8 is considered to be a large E.S. Only an E.S. of .8 or above is considered educationally meaningful.

educationally meaningful. This test was done to assist the program staff in determining the emphasis for staff development.

SCOPE OF THE EVALUATION

The purpose of this report is to describe and assess the effectiveness and impact of the 1985-86 Chapter I Nonpublic School E.S.L. Program. The first chapter provides an introduction to the program and describes the students served and the evaluation methodology. Chapter II discusses program organization and funding, and Chapter III presents and analyzes student outcome data. Chapter IV offers conclusions and recommendations. The Appendix provides a brief description of Chapter I Nonpublic School Reimbursable 1985-86 Programs.

II. PROGRAM ORGANIZATION

PROGRAM ORGANIZATION AND FUNDING

During the 1985-86 school year, 4,305 students from 111 nonpublic schools participated in the E.S.L. Program. Total funding for this program was $3.5 million. About three-quarters of the participating students were in kindergarten, first, and second grades. Students participating in the program for their first year constituted a majority (60 percent). Participants came from seven specified different language backgrounds; a majority were Spanish-speaking students (67 percent). The E.S.L. instruction was given two to five times a week to groups of five to ten students, with the length of the sessions ranging from 30 to 60 minutes. Students were grouped by grade level and by linguistic level on the OIT. The class schedule of the nonpublic school, availability of the E.S.L. classes, and the desirability of having approximately five to ten students in a group were also considerations.

Program staff consisted of one coordinator, two field supervisors, and 80 teachers. All teachers received in-service training from the coordinator and the field supervisors. This training included meetings, demonstrations of commercial and teacher-made materials, and discussions of instructional strategies and techniques.

CURRICULUM

The E.S.L. curriculum is based on eight cognitive goals

defined in the kindergarten through eighth-grade E.S.L. Curriculum Guide. These goals are subdivided into conceptual (content areas), cognitive (thinking skills), and linguistic skills. The program teaches these skills through aural-oral activities (receptive and expressive language) and through reading and writing. Within each goal, the linguistic items are sequentially organized by degree of difficulty: beginning, intermediate, and advanced. Using the OIT results, program staff initially grouped students into these three levels. Pupils who scored between one and 19 raw-score units were placed at the beginner level; those who scored between 20 and 25 units were placed at the intermediate level; and those who scored between 26 and 30 units were placed at the advanced level.

In some cases, students from different grades were included in the same level of English proficiency. However, classroom instruction varied according to grade level: teachers stressed reading and writing in the upper grades and listening and speaking in the lower grades. The E.S.L. teachers were able to go beyond these grade level emphases by using a diagnostic-prescriptive approach to determine students' individual problem areas, and, by using appropriate curriculum materials, they were able to design lessons to meet individual learning needs and styles.

Instructors had a wide latitude in their choice of teaching materials: the Miami Linguistic Series; word cards; library books; and games. Class activities included informal conversa-

tions to introduce vocabulary and reinforce aural-oral skills (receptive and expressive language) pronunciation drills, dialogues, dramatizations, and role-play situations. Students' use of English in realistic settings was enhanced by these varied materials and class activities.

Nine percent of the students (388) were given tape recorders, audio tapes, and storybooks to take home; this was called the Read-Along Program. The teachers chose the participants based on the students' ability to read the storybooks along with the tapes. Consequently, upon selection, the Read-Along students were better achievers with respect to aural comprehension.

STAFF DEVELOPMENT

Teachers in the E.S.L. Program attended 23 staff development conferences during 1985-86. These conferences focused on: E.S.L. methods, curriculum, and instructional materials; teaching techniques and testing procedures; and the special needs of E.S.L. students. Designed for both regular teachers and newer teachers, the workshops covered a wide range of topics. A content analysis of the agenda topics indicated four substantive headings under which the agenda topics could be grouped: administrative issues, E.S.L. teaching/testing techniques, curriculum/materials, and presentations.

Administration issues were addressed by topics like discussion of report cards, program reports, Regents' Action Plan, equipment inventory forms, distribution of tests, OIT data

collection, paraprofessional assignments, and storage areas.

E.S.L. teaching/testing techniques were discussed through the sharing of reading lessons and techniques used in the program; they included: writing additional reading lessons, using "Read-Along" audio tapes, and developing skills in selecting and telling appropriate stories. Also discussed were: puppetry as a means of communication in E.S.L. classrooms, photography, "Construct-a-Fairy Tale," E.S.L. techniques in the content areas, and OIT charts. The testing concerns included needs assessment, testing procedures, diagnosing, and prescribing.

Curriculum/materials topics included "make your own film strip project," Statue of Liberty activities, cameras in the curriculum, Reading Milestones, Breakthrough to Literacy, and library books coordinated with the E.S.L. curriculum. Finally, the teachers took part in a number of presentations by outside agencies covering topics relevant to E.S.L.:

-- Miami Linguistic Readers

-- KIDS project (designed to sensitize teachers, supervisors, and students to the problems of the handicapped)

-- Impact II: Teacher to Teacher Intracity Network

-- Museum presentations

-- Teacher presentations

-- National Origin Desegregation Assistance Center

- Defining the E.S.L. Program
- Current E.S.L. methods
- Evaluation of E.S.L. materials
- Self-assessment of teachers

- Assessment of pupils programs

-- Expectations of LEP pupils

-- Presentations by the Brooklyn Botanical Garden staff

-- Presentations by the New York Historical Society

-- Presentations by the United Nations' "Linguistic Rights of Minorities"

III. STUDENT OUTCOME DATA

Standardized and program-developed tests were used to measure gains in student academic achievement, and analyses were performed according to the characteristics of the student participants. This chapter presents the results of these tests and analyses.

ATTENDANCE

The average rate of attendance was 93 percent.* Most students (60 percent) attended E.S.L. two days a week; 35 percent attended for three days; and the rest (five percent) attended four or five times a week. The E.S.L. sessions ranged from 30 to 60 minutes each, with the majority of students assigned to attend 45- or 60-minute sessions (28 percent and 47 percent, respectively).

ACADEMIC ACHIEVEMENT FINDINGS

Evaluation Instruments

The following instruments were used to evaluate student academic performance. Students in kindergarten and first grade took the 26-item language subtest of the TOBE. Each test item consisted of an oral stimulus and four pictorial responses from which the student chose one correct answer. These data are reported as N.C.E. scores.

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*Aggregate attendance information was provided by project staff to the O.E.A.

Students in grades two through eight took the Vocabulary and Listening Comprehension subtests of the S.A.T., which together comprise the Total Auditory subtest. All students in these grades took the Primary Level of the test, which is normed for second-graders. The raw-scores of students beyond grade two cannot be expressed in N.C.E. units because norms for the Primary Level of the Total Auditory subtest have not been established above the second grade. An analysis were performed on the N.C.E. scores of second-graders. The raw-scores were used for the analysis of the third through eighth-graders' scores.

The OIT, an informal, staff-developed, criterion-referenced instrument designed to assess students' cognitive and linguistic skills, was administered to students in kindergarten through eighth grade. Their oral responses are elicited through the use of pictorial stimuli. The OIT is divided into four sections: a warm-up interview that is not scored, a section measuring oral comprehension, a section measuring the ability to repeat sentences, and a section measuring oral discourse (fluency). Students answered a total of 30 scored questions; test results are reported in raw score units.

The evaluation criteria mandated by the State Education Department is a five-N.C.E. gain or a statistically significant improvement. The kindergarten through second grade students' scores were converted to N.C.E. scores and the gains were compared to the five-N.C.E. gain criteria. For the raw-score gains on the S.A.T. (grades three through eight) and the OIT,

correlated t-tests were computed to determine statistical significance. In addition, an E.S. was calculated on all tests outcomes to determine whether the performance gains were educationally meaningful and to assist the program staff in determining the emphasis for staff development.

Academic Achievement

The analyses of the test data on the TOBE, S.A.T. and the OIT show that students made statistically significant and educationally meaningful achievement mean gains in all grades and on all tests. The principal findings of the evaluation are described below.

Table 4 displays student scores on the Language subtest of the TOBE (administered to kindergarten and first-grade students), and on the Total Auditory subtest of the S.A.T. (administered to second-grade pupils). Mean N.C.E. gains for these three grades were more than double the program objective of a gain of five N.C.E.s. Mean gains ranged from 10.3 N.C.E.s in second grade to 15.8 N.C.E.s in kindergarten. Correlated t-tests of pretest and posttest scores were conducted for kindergarten to grade two students and the mean differences were statistically significant for all grades. All E.S.s were equal to or larger than .8, indicating that mean gains were educationally meaningful for all grades.

Since the distribution of pretest scores was skewed for these grades, a related sample nonparametric test of difference

TABLE 4

Full-Year Students' Mean N.C.E. Score Gains on Standardized Tests, by Grade, in the E.S.L. Program, 1985-86

Grade[a]	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Difference[b] Mean	Difference[b] S.D.	Effect Size
K	860	16.7	15.5	32.5	16.8	15.8	16.7	.9
1	1,098	15.8	13.5	28.8	17.6	13.0	16.0	.8
2	900	16.9	12.0	27.2	16.9	10.3	12.1	.9
TOTAL	2,858	16.4	13.7	29.4	17.2	13.0	15.3	.8

[a]Students in kindergarten and first grade took the Language subtest of the TOBE. Second-graders took the Total Auditory subtest of the S.A.T.

[b]All mean differences were statistically significant at $p \leq .05$.

- Kindergarten students achieved a mean N.C.E. score gain from pretest to posttest of nearly 16 points.
- All mean gains were statistically significant, and had educationally meaningful E.S.s.

between pretest and postttest scores was conducted for each grade. The results confirm the significance of results generated from the correlated t-tests reported above.

Student achievement for grades three through eight was measured using the Total Auditory subtest of the S.A.T. (Table 5). Mean pretest raw scores ranged from 35.1 units in grade five to 41.8 units in grade eight, and mean posttest raw scores ranged from 45.7 units in grade seven to 49.5 units in grade eight. Mean raw-score gains for individual grades ranged from 7.7 units in grade eight to 11.8 units in grade five.* All mean differences were statistically significant, meeting the program's success criterion.

The E.S. was above 1.0 for all grades, indicating that student improvement was educationally meaningful.

Table 6 shows student outcomes, according to grade, on the OIT. All mean gains were statistically significant. Students at all grade levels made similar gains ranging from 5.9 raw-score units in grade six to 7.3 raw-score units in grade seven. Overall mean raw-score gain was 6.6 raw-score units. Pretest raw scores were lowest for kindergartners and first-grade students (4.6 and 8.0 raw score units, respectively). At upper grade levels, mean pretest raw scores were higher, ranging from 12.3

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*Note that although students from all grades were administered the same test level, students from higher grades did not achieve larger gains at posttest. It is possible that other extraneous variables also had some effect on the students' test results.

TABLE 5

Full-Year Students' Mean Raw-Score Gains, by Grade, on the Total Auditory Subtest of the S.A.T. in the E.S.L. Program, 1985-86

		Mean Raw Score						
		Pretest		Posttest		Difference[a]		Effect
Grade	N	Mean	S.D.	Mean	S.D.	Mean	S.D.	Size
3	407	38.2	11.8	47.1	9.4	8.9	7.2	1.2
4	222	39.5	16.4	49.1	10.5	9.6	9.9	1.0
5	126	35.1	18.1	46.9	11.1	11.8	11.9	1.0
6	98	37.6	17.8	48.4	12.2	10.7	9.7	1.1
7	89	35.3	17.3	45.7	11.9	10.4	10.2	1.0
8	42	41.8	12.5	49.5	10.3	7.7	7.0	1.1
TOTAL	984	37.9	15.1	47.6	10.5	9.7	9.1	1.1

[a]All mean differences were statistically significant at $p \leq .05$.

- Mean raw-score gains ranged from 7.7 units in grade eight to 11.8 units in grade five.
- The overall mean raw-score gain for all grades was 9.7 N.C.E.s.
- Mean gains were statistically significant, and the E.S.s were large and educationally meaningful.

TABLE 6

Full-Year Students' Mean Raw-Score Gains, by Grade, on the OIT in the E.S.L. Program, 1985-86

		Mean Raw Score						
		Pretest		Posttest		Difference[a]		Effect
Grade	N	Mean	S.D.	Mean	S.D.	Mean	S.D.	Size
K	857	4.6	3.7	11.4	5.0	6.8	3.7	1.8
1	1,096	8.0	4.6	15.1	4.7	7.0	3.5	2.0
2	901	12.3	5.3	18.5	4.7	6.2	3.5	1.8
3	406	14.5	5.7	20.6	4.9	6.1	3.8	1.6
4	223	15.0	9.8	21.7	8.7	6.7	4.5	1.5
5	133	13.3	7.6	19.8	5.5	6.5	4.5	1.4
6	108	15.1	7.6	21.0	5.5	5.9	4.5	1.3
7	104	14.1	7.3	21.4	5.4	7.3	4.5	1.6
8	43	16.6	7.3	22.6	5.6	6.0	4.6	1.3
TOTAL	3,871	10.0	6.7	16.6	6.3	6.6	3.8	1.7

[a]All mean differences were statistically significant at $p \leq .05$.

- Mean raw pretest scores for all grades fell within the elementary range (scores of 0-19).
- Mean raw posttest scores for grades three and above were in the intermediate range (scores of 20-26).
- Mean gains were statistically significant, and the E.S.s were large and educationally meaningful.

raw-score units for grade two to 16.6 raw-score units for grade eight. Mean raw pretest scores for all grades were within the elementary level range. While mean raw posttest scores remained within the elementary range for kindergarten through second grade, those for grades three through eight were above 19 units, indicating that students had moved from the elementary to the intermediate level. E.S.s, ranging from 1.3 in grade six to 2.0 in grade one, show that achievement gains were large and educationally meaningful.

Tables 7 and 8 compares mean gain score increases from pretests to posttests of two groups -- Read-Along students and non-Read-Along students. An analysis of covariance was used in order to take into account the pretest differences between the two groups of students. Although both groups made statistically significant mean gains, the Read-Along students, who used tapes at home, had a significantly higher mean gain score than had students not using the tapes. This comparison includes students from grades one and two only.* Table 7 provides the adjusted posttest mean scores for these two groups. The adjusted posttest mean score for students using the audio tapes was 38.3 N.C.E.s, whereas the adjusted mean posttest score for those not using the tapes was 36.9 N.C.E.s. The mean difference, which was

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*Students from grades three and four were not included because even though students from grades three and four displayed statistically significant mean differences from pretest to posttest scores, there were no significant differences between the Read-Along and Non-Read-Along groups.

TABLE 7

Analysis of Covariance on Mean N.C.E. Scores of Full-Year Grade One and Grade Two Students by Participation in the Read-Along Program on the TOBE and on the Total Auditory Subtest of the S.A.T., 1985-86

Students	N	Adjusted Posttest Mean	S.D.
Read-Along	151	38.3	12.4
Non-Read-Along	146	36.9	12.3
Mean Difference Between Groups		1.4[a]	

[a]This difference was significant at $p \leq .05$.

- The Read-Along students scored significantly higher than did the non-participating students.

statistically significant, showed that the Read-Along students scored significantly higher than did non-Read-Along students.

Table 8 shows the analysis of covariance on the raw scores of full-year grade one and grade two students on the OIT. The analysis determined that the adjusted posttest mean score of the Read-Along students in comparison to that of non-Read-Along students was not statistically significant.

TABLE 8

Analysis of Covariance on Mean Raw-Scores of Full-Year Grade One and Grade Two Students, by Participation in the Read-Along Program on the OIT, 1985-86

Students	N	Adjusted Posttest Mean	S.D.
Read-Along	151	18.1	4.1
Non-Read-Along	145	18.3	5.3
Mean Difference Between Groups[a]		0.2	

[a]This difference was not statistically significant (F=.2, p=.65).

- The mean difference between the adjusted posttest scores of Read-Along Students and that of Non-Read-Along students was not statistically significant.

IV. CONCLUSIONS AND RECOMMENDATIONS

The main objectives of the 1985-86 Chapter I Nonpublic School E.S.L. Program was to increase the learning potential of students with limited English proficiency and to improve their academic performance in Chapter I instructional programs and in their regular classes.

The program served 4,305 elementary students from 110 nonpublic schools. Almost 75 percent were in kindergarten, first, and second grades. Sixty percent of the pupils were in the program for the first time. Although these students came from a variety of language backgrounds, the majority were Spanish-speaking.

To determine the impact of the E.S.L. Program on student achievement, analyses were performed on students' pretest and posttest scores on the following instruments: the TOBE, the Total Auditory subtest of the S.A.T., and the OIT. Test results indicated that the E.S.L. Program was very successful. For each instrument and in nearly every grade, students made statistically significant and educationally meaningful mean gains.

CONCLUSIONS

The evaluation of test outcome data showed that all program goals were met. Students made statistically significant and educationally meaningful achievement mean gains in all grades and on all tests. The principal findings are summarized below:

- Students in grades kindergarten through two made mean gains above five N.C.E.s on the TOBE or the S.A.T.

Kindergarten students achieved the highest mean gain -- 15.8 N.C.E.s.

- Students in grades three through eight made statistically significant mean gains on the S.A.T. Overall mean gain was 9.7 raw-score units.

- On the OIT, all grade levels made similar mean gains ranging from 5.9 raw-score units in grades six to 7.3 raw-score units in grade seven. Overall, the mean raw score gain was 6.6 units. In relation to pretest scores, posttest scores for grades three to eight moved from the elementary to the intermediate language level.

- Effect sizes were large and educationally meaningful for most tests and grade levels.

- The students receiving the Read-Along audio tapes had a significantly higher average mean gain score on the TOBE and S.A.T. than did students not receiving the audio tapes.

It can be concluded that the 1985-86 E.S.L. Program had a significant impact on student academic performance. However, as stated in the previous year's report, the test data for grades three through eight must be interpreted with caution. This is the case because grades three through eight take the second-grade level of the S.A.T., and no norms exist for this testing situation.

RECOMMENDATIONS

Based on the findings of this evaluation and other information contained in this report, the following recommendations are made:

- Efforts should be made to improve techniques for measuring student progress, including the use of standardized instruments to measure students' growth in all grades. The use of normed tests will facilitate the evaluation of the project; currently, the tests

administered to students in grades three through eight are not normed.

- Because the Read-Along Program contributes to improved achievement, more students should be given access to the audio tapes.

APPENDIX A

Brief Description of Chapter I Nonpublic School
Reimbursable 1985-86 Programs

CORRECTIVE READING PROGRAM

The Chapter I Corrective Reading Program provides supplemental individualized instruction in reading and writing skills to Chapter I-eligible students who score below grade level in reading on standardized tests. The program's goal is to enable students to reach grade level and to perform well in their regular classrooms. The program uses a modified diagnostic-prescriptive approach. During 1985-86, program staff included one coordinator, three field supervisors, and 173 teachers who worked with 10,832 students in grades one through twelve at 238 schools.

READING SKILLS CENTER PROGRAM

The Chapter I Reading Skills Center Program provides supplemental individualized instruction in reading and writing skills to Chapter I-eligible students who score below grade level in reading on standardized tests. The program's goal is to enable students to reach grade level and to perform well in their regular classrooms. The program uses a modified diagnostic-prescriptive approach. One coordinator and 16 teachers worked with 510 students at nine schools.

CORRECTIVE MATHEMATICS PROGRAM

The Chapter I Corrective Mathematics Program provides remedial mathematics instruction to Chapter I students in grades one through twelve with diagnosed deficiencies in mathematics. The main goals of the program are to alleviate deficiencies in mathematical concepts, computation, and problem solving and to assist students in applying these concepts and skills in everyday life. One coordinator, two field supervisors, and 129 teachers served 8,825 students in 186 nonpublic schools.

ENGLISH AS A SECOND LANGUAGE (E.S.L.) PROGRAM

The Chapter I E.S.L. Program provides intensive English language instruction to Chapter I students whose first llanguage is not English. The main goal of the program is to provide students with opportunities to use oral and written English in

situations similar to those they might encounter in everyday life. The program in 1985-86 was staffed with one coordinator, two field supervisors, and 80 teachers. They provided services to 4,305 students in 111 nonpublic schools.

CLINICAL AND GUIDANCE PROGRAM

The Chapter I Clinical and Guidance Program consists of diagnostic services and counseling support for nonpublic school students enrolled in Chapter I remedial programs. Chapter I teachers refer students who show signs of social or emotional problems thought to inhibit academic performance. The Clinical and Guidance Program is seen as a service helping students to overcome obstacles standing in the way of better academic achievement. Program staff consisted of two coordinators, three field supervisors, 123 guidance counselors, 57 clinicians, and 23 social workers serving 10,533 students in 201 schools.